AMENDMENTS TO THE SPECIFICATION

Please amend page 1 of the specification by adding the following paragraph at the top of the page:

TITLE OF THE INVENTION

Please also amend page 1 of the specification by adding the following paragraph after the phrase "ANTI-AURORA-A MONOCLONAL ANTIBODY, METHOD FOR OBTAINING SAME, AND USES THEREOF FOR DIAGNOSING AND TREATING CANCERS":

CROSS-REFERENCE TO RELATED APPLICATIONS

Please also amend page 1 of the specification by adding the following paragraphs immediately prior to the paragraph beginning "A subject of the present invention is a monoclonal antibody. . .":

STATEMENT REGARDING FEDERALLY SPONSERED RESEARCH OR DEVELOPMENT

Not Applicable

THE NAMES OF PARTIES TO A JOINT RESEARCH AGREEMENT

Not Applicable

INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC

Not Applicable

BACKGROUND OF THE INVENTION

Please amend the specification by adding the following paragraph between lines 6 and 7 on page 2 of the specification:

BRIEF SUMMARY OF THE INVENTION

Please amend the specification by inserting the following paragraphs between lines 10 and 12 of page 7 of the specification:

BRIEF DESCRIPTION OF THE DRAWINGS

Figure 1: Scanning of the hybridomas by Western blot. The purified recombinant aurora-A protein was deposited on polyacrylamide-SDS gel and transferred onto a nitrocellulose membrane. The membrane was stained poppy red and the band corresponding to aurora-A was cut out. Each panel corresponds to a piece of membrane with aurora-A. After fusion the cells were distributed in 96-well dishes. In order to screen the presence of anti-aurora-A monoclonals of the aliquots of the supernatants, wells of each column are grouped in pools, this being done for each dish. Each pool is then tested using Western blot right-hand column from 1 to 12. When a pool is considered to be positive, here the pool number 1, the supernatants of each well which constitute this pool (from A to H) are retested individually. In this specific case the wells A and B contained antibodies, but only well B was retained.

Figure 2: Western blot. The total acellular extracts are separated on polyacrylamide SDS gel and the gel is transferred onto nitrocellulose membrane. Well 1 does not contain extract and well 2 contains 10 µl of extract (corresponding to 10^6 cells per ml). The antibody is used at a dilution of 1/100. Only the aurora-A protein of 46 kD is detected.

Figure 3: Indirect immunodetection of aurora-A in human and murine cells. The human cells are MCF7 and the murine cells are LLC1. In immunofluorescence DNA is detected by staining DAPI (blue), γ-tubulin (red) and aurora-A (green).

Figure 4: Immunoprecipitation of aurora-A. The protein is immunoprecipitated by the 35C1 antibody conjugated with the A-Sepharose protein. The immunoprecipitates are separated on a polyacrylamide-SDS gel, the gel is transferred and the immunocomplexes revealed with the 35C1 monoclonal. Well 1: the 35C1 antibody only; well 2: immunoprecipitation carried out with the A-Sepharose protein only; well 3: immunoprecipitation carried out with the 35C1 monoclonal antibody; well 4: immunoprecipitation carried out with an antibody prepared in the laboratory.

Figure 5: Activity of the purified human recombinant aurora-A kinase measured in the presence of the 35C1 monoclonal antibody. The 1C1 antibody directed against the aurora-A protein of the xenopus genus and which does not cross with the human protein is used as control. The kinase activity is measured using MBP (Myelin Basic Protein) as substrate.

Figure 6: Activity of the endogenous aurora-A protein immunoprecipitated by the 35C1 antibody fixed on protein beads A-Dynabeads. The kinase activity is measured on a substrate comprising only one serine which can be phosphorylated. It is a GST construction in fusion with the tail of the H3 histone (with serine 10). A control substrate is also used where the serine 10 is

replaced by an alanine. Wells 1, 4 and 7 contain purified recombinant aurora-A are used. Wells 2, 5 and 8 contain immunoprecipitated recombinant aurora-A and are fixed to the antibody and to the A-Sepharose protein. Wells 3 and 6 do not contain kinase. Wells 3, 4 and 5 contain the phosphorylatable substrate GST-H3(S) and wells 6, 7 and 8 the non-phosphorylatable GST-H3(S/A) substrate for the kinases.

DETAILED DESCRIPTION OF THE INVENTION

Please amend the specification by deleting the paragraphs on pages 15-16 of the specification beginning with the phrase "Legend of the figures" page 15, line 2, and ending with the phrase "the non-phosphorylatable GST-H3(S/A) substrate for the kinases" on page 16, line 17.